

COMMUNITY EMERGENCY RESPONSE TEAM

SESSION VII:

COURSE REVIEW AND DISASTER SIMULATION

EMERGENCY MANAGEMENT INSTITUTE

NATIONAL EMERGENCY TRAINING CENTER

DISASTER SIMULATION

SESSION VII

COURSE REVIEW AND DISASTER SIMULATION

TIME: 2 hours 30 minutes

OBJECTIVES

At the conclusion of this session, the participants will be able to apply the skills and knowledge learned in Sessions I through VI to a simulated disaster situation.

SCOPE

- Introduction And Overview
 - Final Examination Review
 - Course Review
 - Disaster Simulation
 - Exercise Critique And Summary
 - Graduation
-

TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Session VII: Course Review And Disaster Simulation, and will introduce the instructors for the session. The instructor will then explain that this session is the culmination of all that the participants have learned and practiced over the last six sessions, and will briefly overview how the session will proceed.

Next, the instructor will review the take-home final examination. (The Answer Key is provided in the “Additional Materials” section at the end of the materials for this session.) Then the instructor will provide a brief review of the key concepts that were covered in earlier sessions and answer questions as necessary.

After answering all questions, the instructor will explain how the disaster simulation will be run and point out that the intent of the simulation is to give the participants a practical perspective of overall team operations, while further improving their skills. The instructor will emphasize the team strategies covered in Session VI and will set the stage for conducting exercises in either a light- damage or moderate-damage scenario.

DISASTER SIMULATION

TRAINING METHODS (Continued)

Throughout the simulation, the instructors should stress that the participants must treat the exercise as if it were real, and train as if lives were depending on it. The instructor will point out that mistakes made during training are lessons learned—lessons that may someday save lives and prevent injuries. The instructor should, therefore, encourage leadership, decisive actions, and assertive behavior during the exercise to maximize the learning experience.

At the end of the disaster exercise, the instructor will lead an interactive discussion of the points learned and the difficulties encountered during the exercise. The instructor will express a positive attitude about the teamwork required and displayed to accomplish the simulated CERT mission.

REFERENCES

Community Emergency Response Team Instructor Guide
Community Emergency Response Team Participant Handbook
Graduation Certificate (to be developed locally or obtained through the Emergency Management Institute—see page IG viii)

EQUIPMENT

In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this session:

- Helmet and vest
- Pieces of wood, furniture, or other items to simulate debris
- Two or more poles
- Moulage (used to simulate injuries)
- Other equipment items that may be available from earlier sessions, which may add to the realism of the simulation

PREPARATION

The disaster simulation requires you to set up four stations:

- At Station 1, the participants will receive the disaster simulation. Based on that scenario, the participants will:
 - Determine the extent of damage.
 - Establish team priorities.
 - Determine the resources needed.
 - Identify potential hazards.

DISASTER SIMULATION

PREPARATION

(Continued)

The participants will also select a CERT Leader who will establish a CERT organization based on resources available and established priorities.

- At Station 2, the participants will be required to:
 - Evaluate a fire situation.
 - Select the proper extinguisher.
 - Extinguish a fire.

NOTE: Each participant will extinguish the fire.

- At Station 3, the participants will be required to conduct triage and treat victims with the medical equipment available.
- At Station 4, the participants will perform leveraging and cribbing to extricate victims who are trapped by debris.

Instructor requirements for preparing each station follow:

- Station 1: The disaster simulation should be based on a potential disaster event *for your community*. Before the session begins, develop a disaster scenario that will meet the participants' needs. A sample disaster scenario is included in the Additional Materials section of this session so that you can see the type of exercise that will be required.
- Station 2: Set up Station 2 in the same manner as for the fire suppression exercise in Session 2. Provide multiple types and sizes of extinguishers so that participants must select the proper type of extinguisher for the fire.
- Station 3: Before the session begins, identify several types of injuries that would be commonly incurred as a result of the disaster described in the simulation. Select several assistant instructors as victims and have them apply moulage to indicate wounds.
- Station 4: Select several assistant instructors to serve as victims. Use pieces of wood, furniture, or other items (to simulate debris) to "trap" the victims. Provide additional materials that can be used in a leverage and cribbing operation as well as blankets, etc. that could be used if necessary to lift or otherwise move the victim from his or her entrapment.

DISASTER SIMULATION

NOTES

A suggested time plan for this unit is as follows:

Introduction And Overview	5 minutes
Final Examination Review	30 minutes
Course Review	30 minutes
Disaster Simulation.....	60 minutes
Exercise Critique And Summary	25 minutes

Total Time: 2 hours 30 minutes

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

*Total Topic:
2 hours 30 minutes*

*Total Topic:
5 minutes*

SESSION VII: COURSE REVIEW AND DISASTER SIMULATION

INTRODUCTION AND OVERVIEW

- Welcome the participants to Session VII of the CERT training program. Introduce the instructors for this session.
- Begin by telling the participants that this session is the culmination of all that they have learned throughout the course. Tell them that after brief reviews of the final examination and the key points of the course, they will have the opportunity to use their skills and knowledge of CERT organization and operations in a simulated disaster exercise.
- Make any administrative announcements that may be required at this time (e.g., make-up classes).

Total Topic: 30 minutes

Refer to the Examination Master, included in the "Additional Materials" section at the end of the text for this session.

FINAL EXAMINATION REVIEW

- Review the correct answers to the final examination.

SUMMARY AND TRANSITION

- Ask the participants if anyone has questions about anything related to the final examination.
- Tell the group that, for the next 30 minutes, they will review the key points of the course.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

*Total Topic:
30 minutes*

Present key points

COURSE REVIEW

Instructor Note: Spend approximately 5 minutes reviewing the key points from each session. Points that should be included in the course review are listed below and on the following pages.

- Cover the following points for the Fire Suppression session:
 - *Hazardous materials.* Cover:
 - Identification
 - Defensive strategies
 - *Utility control.* Cover:
 - Gas
 - Electric
 - Water
 - *Size-up.* Stress the importance of CERT size-up and the steps in the size-up process.
 - *Firefighting resources.* Cover:
 - General resources available
 - Interior wet standpipes, including operation and limitations
 - Portable fire extinguishers, their capabilities and limitations

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

COURSE REVIEW (Continued)

- *Approaching smoke-filled areas.* Stress the rules that CERT members should follow when checking for or working in a smoke-filled area. Include:
 - Confinement
 - Ventilation methods
- *Safety considerations.* Stress the following points:
 - Safety equipment must be used at all times.
 - CERT members must always use the buddy system.
 - Fire suppression group leaders should always have a back-up team available.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

Present key points.

- Cover the following points for disaster medical operations:
 - *The “killers.”*
 - *Head-Tilt/Chin-Lift method of opening an airway.*
 - *Methods for controlling bleeding. Cover:*
 - Direct pressure
 - Elevation
 - Pressure points
 - Tourniquet
 - *Treatment for shock. Cover:*
 - Patient position
 - Maintenance of body temperature
 - No food or drink

COURSE REVIEW (Continued)

- *Conducting triage evaluations.*
- *Head-to-toe patient assessments.*
- *Special considerations when head, neck, or spinal injuries are suspected.*
- *Treatment area considerations.*
- *Splinting and bandaging.*

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

Present key points.

- Cover the following points for light search and rescue:
 - *Search and rescue are really two functions.*
 - *Goals of search and rescue.* Stress:
 - Rescuing the greatest number of people in the shortest amount of time
 - Rescuing the lightly trapped victims first
 - *Size-up.* Briefly review:
 - Construction types
 - Related hazards
 - *Structural damage.* Stress the CERT mission when there is:
 - Light damage
 - Moderate damage
 - Heavy damage

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

Present key points.

COURSE REVIEW (Continued)

- *Search techniques.* Cover the need to:
 - Be systematic and thorough (including techniques for searching structures)
 - Mark areas searched
 - Document search results
- *Rescue techniques.* Review the main rescue techniques:
 - Leverage and cribbing
 - Lifts and drags
- Cover the following points for CERT organization:
 - *Organizational structure.* Review the benefits of the CERT organization:
 - Effective communications among agency personnel
 - Well-defined management structure
 - Accountability
 - *Command objectives.* Stress the need to:
 - Identify the scope of the incident through damage assessment
 - Determine an overall strategy and logistical requirements
 - Deploy resources

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

?

Discussion question.

SUMMARY AND TRANSITION

- Ask the participants if anyone has questions about anything covered in the course.
- Tell the group that for the next hour, they will have the opportunity to put their knowledge and skills to the test through a simulated disaster exercise.

YOUR NOTES:

DISASTER SIMULATION

INSTRUCTOR NOTES

*Total Exercise:
60 minutes*

CONTENT/ACTIVITY

DISASTER SIMULATION

Instructor Note: This exercise will allow the participants to use the skills and knowledge they have learned throughout their CERT training. A great deal of preparation is required before beginning this exercise, however. Use the guidelines below as preparation steps.

PREPARATION

- Preparing for the Disaster Simulation requires the following steps:
 1. Develop a disaster scenario that would be realistic *for your community*.
 2. Identify four areas—three indoors and one outdoors—to serve as exercise stations.
 3. Select nine assistant instructors to serve at the following stations:
 - Two at Station 2 to monitor the fire suppression exercise.
 - Four at Station 3 to serve as victims for triage and treatment.
 - Three at Station 4 to serve as entrapped victims for the leverage and cribbing/victim removal exercise.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

PREPARATION (Continued)

4. Ask one instructor at each station to serve as the lead instructor for that station. The lead instructor will oversee the station setup, monitor safety during the exercise, provide feedback to the participants, and oversee station teardown. Setup for each station is as follows:

- Station 1: Station 1 should include one round table with four chairs. Place one copy of the disaster scenario on the table at each chair.
- Station 2: Set up Station 2 in the same way as for the fire suppression exercise in Session 2. Provide different types and sizes of fire extinguishers at the station so that the participants can select the appropriate extinguisher for the fire.
- Station 3: After applying moulage to simulate injuries that would be common for the disaster scenario, instructors at Station 3 should place themselves in sitting or lying positions around the station. It may be desirable to *not* have all instructors in clear view or easy reach of the participants.
- Station 4: Using pieces of wood, furniture, or other items to simulate debris, cover each of the victims so that participants will need to use leverage and cribbing to remove each victim.

5. Divide the participants into groups of four.

Divide participants into groups.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

PREPARATION (Continued)

6. Explain that the simulation will provide each group with the opportunity to apply many of the skills that they learned during the earlier sessions. Elaborate by telling the participants that the disaster simulation will be conducted at four stations:

- At Station 1, each group will receive the disaster simulation. Based on that scenario, the participants will:
 - Determine the extent of damage.
 - Establish team priorities.
 - Determine the resources needed.
 - Identify potential hazards.

Explain that, while at Station 1, the participants will select a CERT Leader who will establish a CERT organization based on resources available and established priorities.

- At Station 2, the participants will be required to:
 - Evaluate a fire situation.
 - Select the proper extinguisher for the situation.
 - Extinguish the fire.

Remind the participants that *each* will be required to extinguish the fire.

- At Station 3, the participants will be required to conduct triage and treat victims with the medical equipment available.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

*Total Topic:
25 minutes*

PREPARATION (Continued)

- At Station 4, the participants will perform leveraging and cribbing to extricate victims who are trapped by debris.
- 7. Explain that the participants will have approximately 15 minutes at each station. After 10 minutes, the instructors will provide feedback. Point out that at the end of the exercise, all groups will meet for feedback and a question-and-answer session.

SIMULATION

- Conduct the simulated disaster exercise.

EXERCISE CRITIQUE AND SUMMARY

- At the end of the exercise, conduct an interactive discussion on the points learned and the difficulties encountered during the exercise. Provide the participants with feedback on their performance, including:
 - Overall operations
 - Communications
 - Safety
 - Teamwork
- Ask the participants if anyone has any comments or questions about the exercise.

DISASTER SIMULATION

INSTRUCTOR NOTES

CONTENT/ACTIVITY

EXERCISE CRITIQUE AND SUMMARY (Continued)

- Stress the importance of continuing education and training to maintain and improve the participants' skills and knowledge. Suggest that the participants attend:
 - Periodic refresher training that is offered locally.
 - Standard and advanced first aid courses that are offered through the American Red Cross.
 - Cardiopulmonary resuscitation classes that are offered through the American Heart Association.
- Thank all participants for attending the CERT training.

GRADUATION

- Distribute a certificate of completion to each participant and thank each personally for attending the course.

YOUR NOTES:

COMMUNITY EMERGENCY RESPONSE TEAM

**ADDITIONAL MATERIALS
SESSION VII**

EMERGENCY MANAGEMENT INSTITUTE

NATIONAL EMERGENCY TRAINING CENTER

COMMUNITY EMERGENCY RESPONSE TEAM
FINAL EXAMINATION MASTER

INSTRUCTIONS: This final examination is a take-home test consisting of 26 multiple-choice and short-answer questions. Answer each question using the information presented in class or included in your Participant Handbook. The instructor will discuss your answers during a review period in the next session.

1. A part of our preparedness goal is to prepare yourself for disaster. List six preplanning steps you can take to improve your chances for surviving a disaster at home.

- | | |
|---|-----------------------------------|
| 1. <i>Assemble food & water</i> | 4. <i>Strap water tank</i> |
| 2. <i>Assemble non-food survival supplies</i> | 5. <i>Develop an escape plan</i> |
| 3. <i>Locate utility shutoffs</i> | 6. <i>Buy a fire extinguisher</i> |

Other similar answers are acceptable.

2. During a (disaster specified by instructor), where is a safe place to seek shelter?

Indoors: *Answers will vary by event*

Outdoors: *Answers will vary by event*

In a car: *Answers will vary by event*

3. Water is probably the most important item to store in preparation for a disaster. What is the recommended minimum you should have on hand?

1 gallon per person per day

4. During an incident involving hazardous materials, it is important to keep out of the vapor cloud. Where is the safest area to relocate people who are in the path of the plume or spill?
- a. Uphill and downwind.
 - b. Downhill and upwind.
 - c. *Uphill and upwind.*
 - d. Downhill and downwind.

5. What is the primary hazard associated with a fire involving energized electrical equipment?
- a. Explosion
 - b. Asphyxia
 - c. ***Electrical shock***
 - d. Heat
6. A Class A fire must be overhauled to ensure that the last ember has been extinguished. What side of the fire triangle is removed during this overhaul process?

Heat

7. There are four classes or types of fires. What type of fuels are represented by the following classes?

Class A ***Ordinary combustibles***

Class B ***Flammable liquids***

Class C ***Energized electrical equipment***

Class D ***Combustible metals***

8. We use the acronym P.A.S.S. to remind us of the steps required to properly operate a portable fire extinguisher. What does each letter stand for?

Pull

Aim

Squeeze

Sweep

9. We can effectively save the lives of many injured victims by checking for and treating life-threatening problems immediately. What are the three areas we assess and treat during initial triage?
1. *Airway*
 2. *Uncontrolled bleeding*
 3. *Shock*
10. The most common airway obstruction is:
- a. Dentures
 - b. Food
 - c. *The tongue*
 - d. Saliva
11. The first attempt to control external bleeding should be to apply:
- a. A tourniquet above the wound.
 - b. A pressure bandage over the wound.
 - c. *Direct pressure to the wound.*
 - d. Pressure to the pressure point above the wound.
12. Shock is a life-threatening condition that can be recognized by changes in mental status. During disaster medical operations, how do you treat for shock?
1. *Lay the victim on his or her back, elevate the feet 6 to 10 inches, and maintain an open airway*
 2. *Control obvious bleeding*
 3. *Maintain body temperature*
 4. *Avoid rough or excessive handling*

13. When performing the blanch test, we can assume that the patient's circulatory system is functioning properly if the color returns within how many seconds of releasing the pressure?
- a. 2
 - b. 5
 - c. 10
 - d. 15
14. To check a patient's mental status, we ask:
- a. His or her name.
 - b. The day of the week.
 - c. ***The victim to follow a simple command.***
 - d. If the victim remembers what happened.
15. During a head-to-toe assessment, you have identified an open long bone leg fracture. What treatment should you apply?
- a. Apply a dressing and bandage at the fracture site.
 - b. Realign the broken bone ends. Then apply a splint to immobilize the fracture site.
 - c. ***Control the bleeding at the point of bone exit. Then apply a splint to immobilize the fracture. Evaluate for shock.***
 - d. Push the protruding bone back under the skin. Then apply a dressing and bandage at the fracture site and immobilize the leg using a splint.

16. Burns can present a serious threat to the physical and psychological health of a patient. A victim has a second-degree thermal burn of the right hand. You should:
- Apply ice immediately.
 - Break any blisters and cover the burn with a clean sheet.
 - Irrigate with cool water and cover the burn with a sterile dressing.***
 - Irrigate the burn with cool water but leave the area open to the air to promote healing.
17. Injured patients may need to be relocated from the immediate incident area to a treatment area. List three considerations for locating a treatment area.
- In a safe area***
 - Close to, but uphill and upwind from, the hazard***
 - Accessible by transportation vehicles***
 - Able to grow***
18. Following a disaster where there has been a disruption of water distribution and sewer systems, there is a potential for an increased incidence of disease. List three steps that disaster medical operations personnel can take to prevent disease and infection.
- Maintain proper hygiene***
 - Maintain proper sanitation***
 - Purify water***

19. The goal of light search and rescue operations is to rescue the greatest number of people in the shortest amount of time. The primary consideration, however, in all search and rescue operations is:
- a. The type of occupancy and potential number of victims.
 - b. Rescuing the lightly trapped victims first.
 - c. ***The safety of the rescuer.***
 - d. The type of construction and severity of damage.
20. The CERT mission for structures that are heavily damaged or contain water that is rising rapidly is to:
- a. ***Secure the perimeter and keep untrained volunteers clear of the area.***
 - b. Locate and rescue the lightly trapped victims immediately. Then triage and treat the victims outside.
 - c. Quickly locate, extricate, and triage the lightly trapped victims.
 - d. Conduct search and rescue operations on the upper levels of the building only.
21. As rescuers, we should be concerned about our safety as well as the safety of the victim. List the five pieces of personal protective equipment that CERT members must always use during light search and rescue operations.
- 1. ***Helmet***
 - 2. ***Goggles***
 - 3. ***Mask***
 - 4. ***Gloves***
 - 5. ***Boots***

22. To prevent duplication of effort during light search and rescue operations, it is necessary to mark areas which are being searched or have already been searched. What marking would you put on a door prior to entering an area to search for trapped victims?

A sideways slash (/)

23. When moving heavy objects, it is a good practice to stabilize them during the lifting operations using blocks, books, or other available materials. What is this procedure called?

Cribbing

24. Any event which has a profound emotional impact can evoke strong reactions. List six common responses to the stressors imposed by a disaster.

- | | |
|-------------------------------------|--|
| 1. <i>Anger</i> | 4. <i>Change in eating habits</i> |
| 2. <i>Inability to sleep</i> | 5. <i>Listlessness</i> |
| 3. <i>Mental confusion</i> | 6. <i>Overworking</i> |

Other answers may also be acceptable.

25. The goal of crisis intervention is to reduce the individual's stress. We can lessen the impact of a disaster by:

- a. Ensuring that the victims are well rested.
- b. *Encouraging the victim to talk about it.***
- c. Conducting briefings with victims before beginning response operations.
- d. Setting up a hotline for victims to use to notify family members.

26. Restoring order after a disaster will require planning and teamwork. What are the four functional groups that should be formed to manage the emergency?

- | | |
|-----------------------------------|--------------------------------------|
| 1. <i>Fire suppression</i> | 3. <i>Search & Rescue</i> |
| 2. <i>Medical</i> | 4. <i>Logistics</i> |